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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,256	11/28/2000	John DeSalvo	CSD-173 (51100)	7913

7590 05/31/2005

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EXAMINER

PHAN, HANH

ART UNIT PAPER NUMBER

2633

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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;

<b>Office Action Summary</b>	Application No. 09/724,256	Applicant(s) DESALVO ET AL.	
	Examiner Hanh Phan	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-13 and 15-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-13 and 15-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 11/15/2004.

#### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the feature “a laser and laser driver for pumping the optical preamplifier, including an injection laser diode and current source control loop circuit operatively connected to the injection laser diode for establishing a fixed current” in claims 1, 11, 21 and 27** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3, 5-13 and 15-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S.

Patent No. 6,542,277 (Lange et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations recited in claims 1-3, 5-13 and 15-31 of the instant application are encompassed by claims 1-25 of U.S. Patent No. 6,542,277 (Lange et al).

Regarding claims 1, 11 and 27, Lange et al (US Patent No. 6,542,277) discloses an optically amplified receiver comprising:

an optical preamplifier for receiving an optical communications signal over a fiber optic communications line;

a laser and laser driver for pumping the optical preamplifier, including an injection laser diode and current source control loop circuit operatively connected to the injection laser diode for establishing a fixed current;

a bandpass filter operatively connected to the optical preamplifier for receiving the optical communications signal, selecting a single channel, and filtering out noise produced by the optical preamplifier;

a PIN detector for receiving the optical communications signal from the bandpass filter and converting the optical communications signal into an electrical communications signal; and

an amplifier circuit for amplifying the electrical communications signal (see claims 1, 6 and 10 of Lange).

Regarding claims 2, 12, 23-25 and 28-31, Lange discloses the bandpass filter is a tunable bandpass filter (see claim 1 of Lange).

Regarding claims 3 and 13, Lange differs from claims 3 and 13 in that he does not specifically teach the PIN diode is operative at about 3.3 volts. However, it would have been obvious to obtain a PIN diode is operative at about 3.3 volts in order to provide a photodiode having high speed of response to light and lower power.

Regarding claims 5, 21 and 22, Lange discloses wherein the laser driver further comprises a voltage switcher circuit connected to the injection laser diode and current source control loop circuit (see claim 6 of Lange).

Regarding claims 6 and 16, Lange discloses the optical preamplifier is connected to a single wavelength optical communications line (see claim 1 of Lange).

Regarding claims 7, 17 and 26, Lange discloses the optical communications signal that is received over the optical communications line comprises a wavelength division multiplexed optical communications signal (see claim 1 of Lange).

Regarding claims 8 and 18, Lange discloses further comprising a demultiplexer operatively connected to the preamplifier and band pass filter for demultiplexing the wavelength division multiplexed optical communications signal (see claim 1 of Lange).

Regarding claims 9 and 19, Lange discloses an electronic limiting amplifier (see claim 11 of Lange).

Regarding claims 10 and 20, Lange discloses the amplifier circuit comprises a decision circuit and clock recovery circuit for retiming the electrical communication signal (see claim 12 of Lange).

5. Claims 1-3, 5-13 and 15-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-31 of U.S. Patent No. 6,748,179 (Lange et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations recited in claims 1-3, 5-13 and 15-31 of the instant application are encompassed by claims 1-31 of U.S. Patent No. 6,748,179 (Lange et al).

Regarding claims 1, 11 and 27, Lange et al (U.S. Patent No. 6,748,179) discloses an optically amplified receiver comprising:

an optical preamplifier for receiving an optical communications signal over a fiber optic communications line;

a laser and laser driver for pumping the optical preamplifier, including an injection laser diode and current source control loop circuit operatively connected to the injection laser diode for establishing a fixed current;

a bandpass filter operatively connected to the optical preamplifier for receiving the optical communications signal, selecting a single channel, and filtering out noise produced by the optical preamplifier;

a PIN detector for receiving the optical communications signal from the bandpass filter and converting the optical communications signal into an electrical communications signal; and

an amplifier circuit for amplifying the electrical communications signal (see claims 1-16 of Lange).

Regarding claims 2, 12, 23-25 and 28-31, Lange discloses the bandpass filter is a tunable bandpass filter (see claims 1-16 of Lange).

Regarding claims 3 and 13, Lange differs from claims 3 and 13 in that he does not specifically teach the PIN diode is operative at about 3.3 volts . However, it would have been obvious to obtain a PIN diode is operative at about 3.3 volts in order to provide a photodiode having high speed of response to light and lower power.

Regarding claims 5, 21 and 22, Lange discloses wherein the laser driver further comprises a voltage switcher circuit connected to the injection laser diode and current source control loop circuit (see claims 1-17 of Lange).

Regarding claims 6 and 16, Lange discloses the optical preamplifier is connected to a single wavelength optical communications line (see claims 1-16 of Lange).

Regarding claims 7, 17 and 26, Lange discloses the optical communications signal that is received over the optical communications line comprises a wavelength division multiplexed optical communications signal (see claims 1-16 of Lange).

Regarding claims 8 and 18, Lange discloses further comprising a demultiplexer operatively connected to the preamplifier and band pass filter for demultiplexing the wavelength division multiplexed optical communications signal (see claims 1-16 of Lange).

Regarding claims 9 and 19, Lange discloses an electronic limiting amplifier (see claims 1-16 of Lange).

Regarding claims 10 and 20, Lange discloses the amplifier circuit comprises a decision circuit and clock recovery circuit for retiming the electrical communication signal (see claims 1-16 of Lange).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-3, 5-13 and 15-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
**HANH PHAN**  
**PRIMARY EXAMINER**